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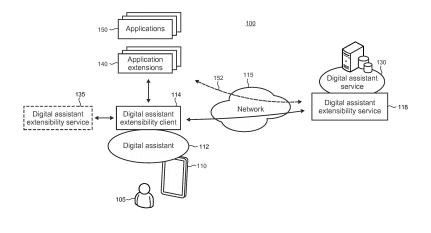
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(54) DIGITAL ASSISTANT EXTENSIBILITY TO THIRD PARTY APPLICATIONS

(57) A digital assistant includes an extensibility client that interfaces with application extensions that are built by third-party developers so that various aspects of application user experiences, content, or features may be integrated into the digital assistant and rendered as native digital assistant experiences. Application extensions can use a variety of services provided from cloud-based and/or local sources such as language/vocabulary, user preferences, and context services that add intelligence and contextual relevance while enabling the extensions

to plug in and operate seamlessly within the digital assistant context. Application extensions may also access and utilize general digital assistant functions, data structures, and libraries exposed by the services and implement application domain-specific context and behaviors using the programming features captured in the extension. Such extensibility to third party applications can broaden the scope of the database of information that the digital assistant may use to answer questions and perform actions for the user.

FIG 1



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PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention. This report shall be considered, for the purposes of subsequent proceedings, as the European search report EP 19 20 6531

		ERED TO BE RELEVANT	T			
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)		
X	J; GRUBER T R; KEEN 21 November 2013 (2 * paragraphs [0002] * * paragraph [0038] * paragraphs [0007] [0065] *	BRIGHAM C D; CHEYER A D; KOCIENDA K) 2013-11-21) , [0080]; figures 1,2 - paragraph [0039] * , [0087], [0091], - paragraph [0086] *	1-13	INV. G06F3/01 H04M1/725 H04L29/08 G06F9/445		
А	application into the and Natural Language MICROSOFT BUILD 201		1-13			
				TECHNICAL FIELDS SEARCHED (IPC)		
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not compl	y with the EPC so that only a partial s	application, or one or more of its claims, does/ earch (R.62a, 63) has been carried out.	ao			
Claims se	earched completely :					
Claims se	earched incompletely :					
Claims no	ot searched :					
Reason for the limitation of the search: See Sheet C						
	Place of search	Date of completion of the search		Examiner		
	Munich	3 June 2020	Hoa	reau, Samuel		
X : part Y : part docu A : tech	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot iment of the same category inological background	nvention shed on, or				
	-written disclosure rmediate document	r, corresponding				

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PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 19 20 6531

EPO FORM 1503 03.82 (P04C10) |

	DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (IPC)	
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	MILHORAT P ET AL: "Building the next generation of personal digital Assistants", 2014 1ST INTERNATIONAL CONFERENCE ON ADVANCED TECHNOLOGIES FOR SIGNAL AND IMAGE PROCESSING (ATSIP), IEEE, 17 March 2014 (2014-03-17), pages 458-463, XP032606026, DOI: 10.1109/ATSIP.2014.6834655 * page 459, right-hand column, paragraph 3.2 *	1-13	
A	DORAN ED ET AL: "Cortana extensibility in Universal Windows Apps", MICROSOFT BUILD 2015, 30 April 2015 (2015-04-30), XP055276775, Microsoft Build 2015 * page 28 *	1-13	TECHNICAL FIELDS SEARCHED (IPC)
A	US 2014/163976 A1 (PARK JIN [KR] ET AL) 12 June 2014 (2014-06-12) * page 1, paragraph 0004 - paragraph 0014; figure 5 * * page 3, paragraph 0044 - paragraph 0047 * * page 7, paragraph 0094 *	1-13	
Α	US 2014/082501 A1 (BAE JOOYOON [KR] ET AL) 20 March 2014 (2014-03-20) * page 2, paragraph 0018 - paragraph 0027 * * page 5, paragraph 0094 * * page 1, paragraph 0006 * * page 4, paragraph 0074 *	1-13	

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INCOMPLETE SEARCH SHEET C

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Claim(s) completely searchable: 10 Claim(s) not searched: 14, 15 Reason for the limitation of the search: 15 Claims 1 and 14 are of apparatus category. However they do not meet the requirements of Art. 84 EPC in combination with Rule 43(2) EPC, that an application may contain more than one independent claim in a particular category only if the subject-matter claimed falls within one or more of the exceptional situations set out in paragraph (a), (b) or (c) of Rule 43(2) EPC. 20 This is not the case in the present application because claim 1 relates to an apparatus for supporting a digital assistant while claim 14 relates to an apparatus for implementing extensibility of a digital assistant to third-party applications. 25 30 35 40 45 50 55

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-06-2020

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
15 20	US 2013311997 A1	21-11-2013	AU 2013262796 A1 AU 2016213815 A1 AU 2018204661 A1 AU 2020201464 A1 CN 104335234 A HK 1206848 A1 JP 6100887 B2 JP 6397067 B2 JP 6670350 B2	27-11-2014 01-09-2016 12-07-2018 19-03-2020 04-02-2015 15-01-2016 22-03-2017 26-09-2018 18-03-2020
25			JP 2015528140 A JP 2017142805 A JP 2019003677 A KR 20150013631 A KR 20170081719 A KR 20170139686 A KR 20190060015 A US 2013311997 A1 US 2019361729 A1 WO 2013173504 A1	24-09-2015 17-08-2017 10-01-2019 05-02-2015 12-07-2017 19-12-2017 31-05-2019 21-11-2013 28-11-2019 21-11-2013
35	US 2014163976 A1	12-06-2014	CN 103869971 A CN 108446022 A EP 2760016 A2 EP 3217394 A1 EP 3410434 A1 KR 20140074549 A US 2014163976 A1 US 2018182374 A1 US 2019362705 A1	18-06-2014 24-08-2018 30-07-2014 13-09-2017 05-12-2018 18-06-2014 12-06-2014 28-06-2018 28-11-2019
40	US 2014082501 A1	20-03-2014	AU 2013231030 A1 AU 2018260953 A1 CN 103677261 A CN 109683848 A CN 109739469 A EP 2723049 A1 EP 3435645 A1	03-04-2014 29-11-2018 26-03-2014 26-04-2019 10-05-2019 23-04-2014 30-01-2019
50			JP 6475908 B2 JP 2014064278 A US 2014082501 A1 US 2018341458 A1 WO 2014046475 A1	27-02-2019 10-04-2014 20-03-2014 29-11-2018 27-03-2014
55 PORM P0459				

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